

ABSTRACT

METHOD OF FABRICATING COMPLEMENTARY BIPOLAR
WITH SiGe BASE REGIONS

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In a method of fabricating complementary bipolar transistors with SiGe base regions the base regions of the NPN and PNP transistors are formed one after the other over two collector regions 20, 14 by epitaxial deposition of crystalline silicon-germanium layers 32a, 36a. With this method the germanium profile of the SiGe layers can be freely selected for both NPN and PNP transistors in thus enabling complementary transistor performance to be optimized individually. The SiGe layers 32a, 36a can be doped with an n-type or p-type dopant during or after deposition of the silicon-germanium layers 32a, 36a.

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